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10/687,951	10/17/2003	Derek Collison	2982P015	9839

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
MOUZON, LAJUANIA N	
ART UNIT	**PAPER NUMBER**
2153	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,951	COLLISON, DEREK	
	Examiner	Art Unit	
	La Juania N. Mouzon	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/2/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/2/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (¶0006). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

4. The disclosure is objected to because of the following informalities: in ¶0051 the references to the network interface device should be 120 not 102.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 12-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As defined in the specification a machine readable medium can be a transmission medium such as carrier wave signals (pg. 23 ¶0051 line(s) 4-9).

7. Software, *per se*:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)
Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7, 9, 12-18, 20, 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al. (US 6,256,676).

10. In regards to claims 1, 12, and 23 Taylor et al. discloses, a method **(Col. 7 line(s) 48-50)**, a machine-readable medium embodying a sequence of instructions **(Col. 8 line(s) 21-25)**, and a system **(Col. 7 line(s) 61-62)** of communicating a message in a computer network, the method including:

a. communicating a first message in at least one of a publish-subscribe arrangement and a queuing arrangement **(Col. 7 line(s) 51-54, teach a first message being communicated in a publish-subscribe arrangement. Likewise, in Col. 14 line(s) 64-67 – Col. 15 line(s) 1-6, teach that the application service includes the enterprise message service (EMS) which is able to communicate in both a publish/subscribe and a point-to-point (also known as queuing) arrangement.)**;

b. and communicating a second message in at least one of a publish-subscribe arrangement and a queuing arrangement, wherein the second message is derived from the first message **(Col. 7 line(s) 54-57, teach a second**

message, that was converted (derived) from the first, being communicated in a publish-subscribe arrangement. Likewise, in Col. 14 line(s) 64-67 – Col. 15 line(s) 1-6, teach that the application server includes the enterprise message service (EMS) which is able to communicate in both a publish/subscribe and a point-to-point (also known as queuing) arrangement.).

11. In regards to claims 2 and 13 Taylor et al. discloses, wherein the publish-subscribe arrangement includes a topic to which at least one of the first and second messages is sent **(Col. 15 line(s) 10-14, teaches that in the publish-subscribe arrangement that the at least one of the first and second message is routed based off of a criteria (Topic). It is further explained in Col. 15 line(s) 50-56, that each message that is configured is configured based off of a message definition, whereas this definition can specify message validation criteria (topic) as explained in Col. 16 line(s) 66-67 – Col. 17 line(s) 1-10.)**, and the queuing arrangement includes a queue to which at least one of the first and second messages is sent **(Col. 20 line(s) 15-27, teach that a message hub as a queue in which at least one of the first and second message is delivered to the message hub (queue).**

12. In regards to claims 3 and 14 Taylor et al. discloses, wherein the publish-subscribe arrangement includes a topic to which both the first and the second messages are sent **(Col. 15 line(s) 10-14, teaches that in the publish-subscribe arrangement that the both of the first and the second message is routed based off**

of a criteria (Topic). It is further explained in Col. 15 line(s) 50-56, that each message that is configured is configured based off of a message definition, whereas this definition can specify message validation criteria (topic) as explained in Col. 16 line(s) 66-67 – Col. 17 line(s) 1-10.).

13. In regards to claims 4 and 15 Taylor et al. discloses, wherein the queuing arrangement includes a queue to which both the first and the second messages are sent **(Col. 20 line(s) 15-27, teach that a message hub as a queue in which both of the first and second message is delivered to the message hub (queue)**.

14. In regards to claims 5, 16, and 24 Taylor et al. discloses, wherein deriving the second message from the first message includes bridging a source and a target destination, wherein the source and target destinations are selected from the group consisting of a publish-subscribe arrangement and a queuing arrangement **(Col. 7 line(s) 51-59, teach that the second message is converted (derived) from the first message by changing the data structure to achieve another publish message (could also be for another queuing destination as pointed out above this system can utilize both arrangements) for another destination. Therefore, when selecting the source and target destination it is pulled from a group of publish- subscribe arrangement and queuing arrangement to achieve an existing source and target destination.)**.

15. In regards to claims 6 and 17 Taylor et al. discloses, wherein the bridge is a software bridge **(Since the entire system is software, this makes the bridge, which**

is implemented in the integration service, software. Col. 13 line(s) 45-49, teach that the main component of the system is a Java virtual machine (JVM) node manager, which provides services to all the other nodes and services, including the application services with the integration service, the user installs.).

16. In regards to claims 7 and 18 Taylor et al. discloses, wherein the software bridge is defined by one of parameters in a system file, an administrator console, and a programmatic API **(Col. 12 line(s) 11-19, teach that the software bridge is defined by an administrator console. Also shown in figure 2, as the administrator console is connected to the integration service.)**.

17. In regards to claims 9 and 20 Taylor et al. discloses, wherein the publish-subscribe arrangement and the queuing arrangement utilize Java messaging **(Col. 13 line(s) 45-49, teach that the main component of the system is a Java virtual machine (JVM) node manager, which provides services to all the other nodes and services the user installs, in which the application service that includes the messaging service. Therefore both arrangements utilize Java messaging.)**.

18. In regards to claim 25 Taylor et al. discloses, system to communicate a message in a computer network, the system including:

c. means to receive the message **(Col. 7 line(s) 57-59, teaches means for receiving the message at a computer application.)**;

d. means to communicate a first message in at least one of a publish-subscribe arrangement and a queuing arrangement **(Col. 7 line(s) 51-54, teach means for a first message being communicated in a publish-subscribe arrangement. Likewise, in Col. 14 line(s) 64-67 – Col. 15 line(s) 1-6, teach that the application service includes the enterprise message service (EMS) which is able to communicate in both a publish/subscribe and a point-to-point (also known as queuing) arrangement.)**;

e. and means to communicate a second message in at least one of a publish-subscribe arrangement and a queuing arrangement, wherein the second message is derived from the first message **(Col. 7 line(s) 54-57, teach means for a second message, that was converted (derived) from the first, being communicated in a publish-subscribe arrangement. Likewise, in Col. 14 line(s) 64-67 – Col. 15 line(s) 1-6, teach that the application server includes the enterprise message service (EMS) which is able to communicate in both a publish/subscribe and a point-to-point (also known as queuing) arrangement.)**.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 8, 10, 11, 19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (US 6,256,676) as applied to claims 1, 12, and 23 above, and further in view of Kang et al. (US 6,954,792).

22. In regards to claims 8 and 19 Taylor et al. do not disclose, wherein the first and second messages are only delivered to a destination that a sender is authorized to communicate with.

23. In the same field of endeavor Kang et al. teach a Java Messaging System (JMS), that utilizes both a publish-subscribe and queuing arrangement, including an access control context module. This module checks to see if the sender is authorized to communicate to the destination **(Col. 10 line(s) 45-52)**.

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Taylor et al. agent-adapter architecture for use in enterprise application integration systems with Kang et al. teaching as discussed above to allow for the capability of adding a module/adaptor, which uses an API that is used in

each system, to an already existing JMS to protect both the connection and destination resources.

25. In regards to claims 10 and 21 Taylor et al. do not disclose, wherein the first and the second messages are only delivered to their destinations when both messages are delivered successfully.

26. In the same field of endeavor Kang et al. teach a Java Messaging System (JMS), that utilizes both a publish-subscribe and queuing arrangement, including an access control context module. This module checks to see if the sender is authorized to communicate to the destination if so the message is delivered to the authorized destination successfully **(Col. 10 line(s) 45-52)**. Therefore it would have been obvious that if this module is added to Taylor et al. invention as an adaptor that the locations of both destinations would be checked and if one location fails then neither message would be send. Since the second message is derived from the first message.

27. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Taylor et al. agent-adapter architecture for use in enterprise application integration systems with Kang et al. teaching as discussed above to allow for the capability of adding a module/adaptor, which uses an API that is used in each system, to an already existing JMS to protect both the connection and destination resources.

28. In regards to claims 11 and 22 Taylor et al. do not disclose, which includes communicating the first and second messages between a messaging server and messaging clients.

29. In the same field of endeavor Kang et al. teach a Java Messaging System (JMS), that utilizes both a publish-subscribe and queuing arrangement, that communicates messages between a messaging server and messaging clients **(Col. 10 line(s) 31-37 and Fig. 1A)**.

30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Taylor et al. agent-adapter architecture for use in enterprise application integration systems with Kang et al. teaching as discussed above to allow for the capability of a having clients exchange message with messaging servers enabling the messaging server then to route the messages.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Robinson (US PGPub 2003/0115366) asynchronous message delivery system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to La Juania N. Mouzon whose telephone number is 571-270-3045. The examiner can normally be reached on Monday - Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNM

/GLENTON B. BURGESS/
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100